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November 5, 2017

RIDEABLE HEXAWALKER IS CHIBIKART'S KIN

by: [Brian Benchoff](#)

20 Comments



September 30, 2012



The folks from MIT made their way to the NYC Maker Faire, and of course brought a [pair of Chibikarts](#). [Nancy Ouyang] wouldn't allow those portable go karts take center stage at the MIT booth though; her Hexarideablepod (yes, that's what she calls it) saw much more action from the kids clamoring to take something for a drive.

From the video above, [Nancy] shows off her six-legged, tennis ball-footed creation. The entire machine is powered by ~~car batteries and is controlled via two joysticks in something resembling driving a tank~~ Nope, it's powered by A123 lipos and controlled with triggers taken from an electric drill.

As per [Nancy]'s wishes, I must mention that this project was for [MITERS](#), a.k.a. the people from MIT that came down to Maker Faire.

Proper video after the break. The Internet at Maker Faire is horrible, give me a break.

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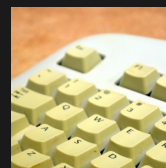


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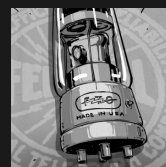
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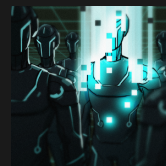
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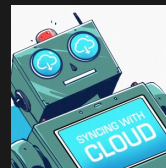
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20 THOUGHTS ON “RIDEABLE HEXAWALKER IS CHIBIKART’S KIN”

KG4MXV says:

September 30, 2012 at 7:57 am

oh well you need to find the orig video LOL

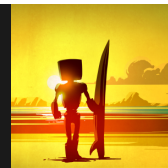
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inci says:

September 30, 2012 at 8:09 am

i found this video on [Nancy Ouyang] blog (<http://orangenarwhals.blogspot.hu/>):



SURFBOARD INDUSTRY
WIPES OUT,
INNOVATION SOON
FOLLOWS

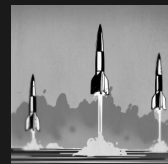
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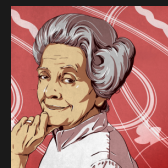
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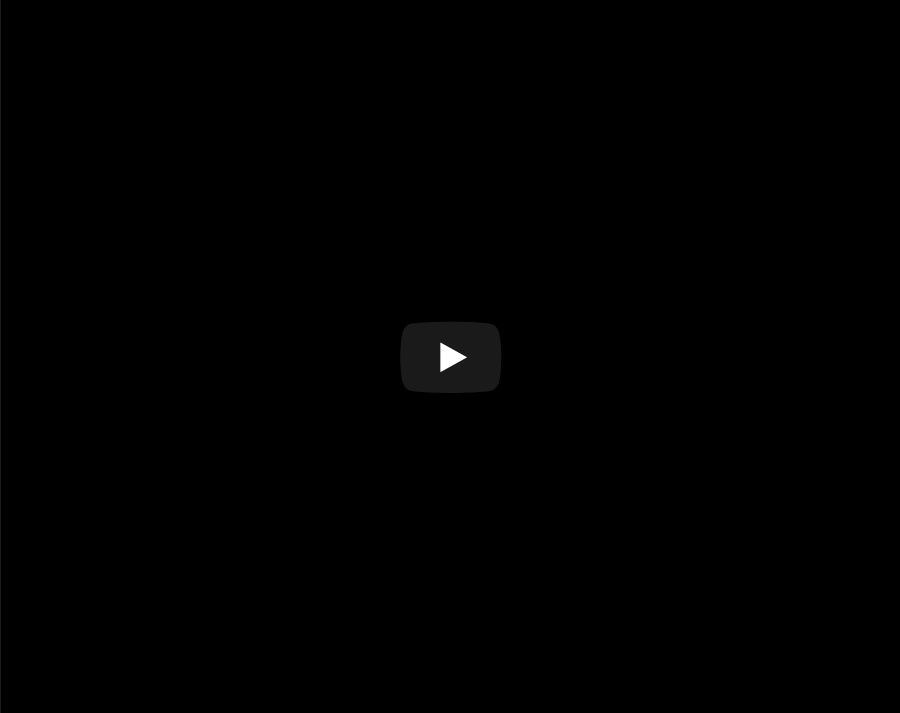
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ecchin says:

September 30, 2012 at 9:52 am

Can’t find anything about this on google :l
Someone up there must be hiding all the evidence about this.

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dannybd says:

September 30, 2012 at 11:04 am

Seems like HAD has the video on their account after all:

LonC on [DIY Multi-Touch All the Surfaces](#)

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Stephen on [What Would Sherlock Print, If Sherlock Printed In SLA Resin?](#)

Rural Joe on [Measuring Airflow in an HVAC System](#)

Dan on [Fridge Alarm Speaks, and Saves Power & Food](#)

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Dan on [Sable-Machined Slingshot is a Composite Marvel](#)

NOW ON HACKADAY.IO

benbutwu liked Cubetrument.

TegwynTwmffat💀 has added a new log for Weedinator.

Sepio wrote a comment on project log UPGRADE THOR+ V2.04.

Sepio wrote a comment on project log The art of debugging through Debug LED.

Sepio has updated the log for Building the Thor+ robot arm.

davedarko wrote a reply on project log lam like Anonymous <3.

Thomas wrote a comment on project log lam like Anonymous <3.

Sepio wrote a reply on project log Day 17: Power supply enclosure.

Sepio wrote a comment on project log Day 17: Power supply enclosure.



Congrats to Nancy and MITERS!

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Anonymous Coward says:

September 30, 2012 at 11:34 am

When a youtube video is removed because it is a duplicate, why is no link provided to the original? This sucks.

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Anonymous Coward says:

September 30, 2012 at 11:42 am

More rideable hexapod video @ 1 minute 1 second:

[Reply](#)[Report comment](#)**lightdesigns** says:

September 30, 2012 at 12:09 pm

Original article video:

[Reply](#)[Report comment](#)**Mark** says:

September 30, 2012 at 12:39 pm

Here's the video from hackaday's youtube channel:



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NewCommentor1283 says:

September 30, 2012 at 3:05 pm

muahahaha

everyone dreams

we make it real

(we = builders and H.W.hackers)

NOW who's the real'est? ha!

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Galane says:

September 30, 2012 at 7:19 pm

Upgrade it with a steering wheel, differential controlling two PWM motor drivers for smooth steering.

Add legs that can extend and retract or at least have some type of suspension for smoother riding motion.

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nouyang says:

October 2, 2012 at 6:28 pm

Ah, but a steering wheel is so much less fun. With the triggers, you can pretend you're on a hexapod robot fighting against the forces of evil!

Hmm. Although, everyone seems to want to do the “walking robot” thing with the arms when they get on it. Maybe I will implement it with pots one day...

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aEx155 says:

September 30, 2012 at 8:59 pm

You could achieve a smoother ride by synchronizing the legs somewhat; with a hexapod you usually want 3 legs on the ground at any time. Since the two sides are independent, three legs on the ground may not always be the case.

Suspension wouldn't hurt either, but doing that would help and it's a lot easier to add.

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nouyang says:

October 2, 2012 at 6:25 pm

Yep! I did want to make a controls system that would enforce the tripod gait. It's very obvious when the legs fall out of tripod gait because then it tends to “gallop” and do the rocking horse thing. Thankfully, little kids just think it's part and parcel of riding a hexapod robot :D

I must admit I have a much clearer idea of how to implement controls than a suspension system. I'm a terrible meche... anyway, unfortunately probably hexarideablepod won't receive any substantial updates anytime soon, because yay more projects!

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Anonymous says:

September 30, 2012 at 10:18 pm

I'd like to point out that it was controlled by two cordless drill triggers, one per motor, not joysticks. Also, the batteries were A123 Systems Lithium iron phosphate batteries, which are about as far from car batteries as you can get.

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anon says:

October 1, 2012 at 3:19 pm

Found the batteries:

http://www.buya123batteries.com/ALM_12V7_p/alm-12v7-b.htm

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rue_mohr says:

October 4, 2012 at 7:51 am

odd, its a replacement for a 12V 7Ah battery, but, its only 4.6Ah !?!?!
That size of lead acid battery comes in capacities of up to 9Ah

[Reply](#)[Report comment](#)**Anonymous** says:

October 1, 2012 at 3:43 pm

Turning every sentence into a question, and it wouldn't be hard to make a smoother, more comfortable, and probably more efficient mechanism than this in a day. Someone making something this unimpressive and being proud that they just ripped the mechanism off from a cheap kids toy can't be the best MIT has to offer...

[Reply](#)[Report comment](#)**nouyang** says:

October 2, 2012 at 6:19 pm

I can see where your comment comes from, because I thought that myself a lot. But I have to say that I hate being "an MIT person." I don't represent MIT, and frankly I am tired of doubting myself and have decided that I will be proud of what I've done. It's fun and the little kids riding it don't care whether it's the most awesome polished original project ever. This was my first major project — I didn't even know how to wire a circuit breaker or how to weld when I started — and no, I didn't inherit it from some other student, I built it by myself. And guess what? Everyone starts somewhere, and it's entirely reasonable to start by copying things to gain the skills I need to make my own things. Yes, this was entirely derived from an awesome instructables by rpalanteo. That sort of attitude discourages people from attempting to start making things, and I suspect disproportionately girls.
/end rant.

[Reply](#)[Report comment](#)**rue_mohr** says:

October 4, 2012 at 7:45 am

your wrong. Anyone building ANYTHING is an achivement. Lots of people, of which I suspect you might be one, spend all thier time not building anything because "the world" is not "up to spec" with "how it ought to be made". It might be a bit crude, I dispise 2 motor hexapods, but SO MUCH is learned in even the simplest build that its always worth it.

[Reply](#)[Report comment](#)**Rich Pantaleo** says:

October 3, 2012 at 4:16 pm

If you'd like to build one, here are the instructions:

<http://www.instructables.com/id/Hexabot-Build-a-heavy-duty-six-legged-robot/>

Also, hackaday covered this years ago when I first published the instructable:

<https://hackaday.com/2008/12/16/6990/>

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